

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

P00036966-P0

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/000564

International filing date (day/month/year)

19.01.2005

Priority date (day/month/year)

30.01.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
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International application No.

PCT/JP2005/000564

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
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International application No.

PCT/JP2005/000564

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3-5, 10, 11, 13, 17-22, 26, 27, 32	YES
	Claims	1, 2, 6-9, 12, 14-16, 23-25, 28-31	NO
Inventive step (IS)	Claims	3-5, 10, 11, 13, 17-22, 26, 27, 32	YES
	Claims	1, 2, 6-9, 12, 14-16, 23-25, 28-31	NO
Industrial applicability (IA)	Claims	1-32	YES
	Claims		NO

2. Citations and explanations:

Document 1: A. Durand et al., "RFC3053: IPv6 Tunnel Broker," 2001.01 "2. Tunnel Broker Model" (pp. 2-7)

Document 2: JP, 2003-244251, A (National Institute of Information and Communications Technology), 29 August, 2003 (29.08.03), paragraphs 0002-0004, 0009-0016, Figs. 1 and 2

Document 3: NAKANO, Koichi, "Solution by L2TP," Computer & Network LAN, Vol. 16, No. 10, 1 October, 1998 (01.10.98), pp. 28-33, "Generation of Tunnel by L2TP" (pp. 30-31)

Claims 1, 2, 6-9, 12, 23-25 and 28-31

Document 1 describes that a tunnel broker, receiving from a client a tunnel opening request between the client and a tunnel server, transmitting to the client information related to setting of a tunnel and thereby setting the tunnel between the client and the tunnel server, and the tunnel broker, not receiving keep-alive and a lifetime extension request from the client, deletes the tunnel.

Document 1 does not clearly describe transmitting information of tunnel deletion ("the maintenance information related to the maintenance of tunnel communication" of the present invention) to the client, however, in the tunnel broker, providing a composition for transmitting the information of tunnel deletion to the client so as to delete the tunnel information set between the client and the server could have easily been done by a person skilled in the art.

Claims 14-16

In the document 1, providing a composition for updating the lifetime of a tunnel managed by the tunnel broker (the "tunnel communication information" of the present invention) upon receiving a lifetime extension request for the tunnel could naturally have been made by a person skilled in the art.

Claims 3-5, 10, 11, 26, 27 and 32

Documents 3-5 do not describe nor suggest the information processing device requesting the transmission of maintenance information, and the tunnel management device receiving a transmission request of maintenance information and transmitting the maintenance information.

Claim 13

Documents 1-3 do not describe nor suggest that the tunnel communication information is a charged information.

Claims 17-22

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

Documents 1-3 do not describe nor suggest an access device which, upon receiving a transmission request for maintenance information, transmits the transmission request to the tunnel management device, and, upon receiving a maintenance information from the tunnel management device, transmits the maintenance information; and a tunnel device which, upon receiving a transmission request for maintenance information from the access device, transmits the maintenance information to the access device.